

previously—falls to half its resting value after interrupted repetitive exercise despite considerable increases in conductance. Thus, repetitive exercise-induced dissociation between conductance and filtration surface occurs in the striated muscle of the forearm. Possible mechanisms for this unexpected dissociation include circulatory redistribution, lymphatic recruitment, rises in interstitial hydrostatic pressure and a number of other causes. Unpublished results of studies in dogs in our laboratory in which polyethylene capsules were used to measure interstitial pressure rule out a rise in this variable as a cause for the dissociation.

The most important conclusion to be noted from these studies is that little filtration occurs in the forearm skin. Apparently epinephrine iontophoresis is not necessary for measuring capillary filtration coefficient in the forearm striated muscle where it chiefly occurs. This renders forearm plethysmography very useful in assessing filtration in muscle. The results also indicate that the hydrostatic or pitting edema of such states as congestive heart failure may occur in the subcutaneous fat layer rather than in the skin.

Finally, muscle VC_{40} at rest and during interrupted

repetitive exercise is unchanged and is about 73% to 84% of the value for skin plus muscle together. During tonic exercise there is selective muscle venoconstriction, probably by passive means, which disrupts the correlation between muscle and muscle-plus-skin values.

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Articles to Read in Other Journals

Anterior Cruciate Deficient Knee—Editorial

Hughston JC

American Journal of Sports Medicine

11:1-2, No 1, 1983

DISCIPLINE: Orthopedic Surgery

READABILITY: Very good

Jack C. Hughston, MD, has made a critical commentary on the term "anterior cruciate deficient knee." Again, this is an editorial of import to primary physicians and orthopedists who are attempting to evaluate and advise patients with acute knee injuries and chronic knee problems. This editorial defines one of the controversies arising in orthopedic surgical treatment today.

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